

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

The current listing of claims replaces all prior listings

Claims 1-23. (Cancelled)

24. (Currently amended) ~~An combination of isolated polynucleotides comprising: a) a first and second polynucleotide primer selected from: a) a first polynucleotide each of which binds comprising at least 20 contiguous nucleotides capable of binding to a first strand of a target sequence-SNP position associated with a trait on bovine genomic DNA, wherein the SNP position is located in a region less than about 500,000 nucleotides from nucleic acid residue 300 of SEQ ID NO:20614, wherein the trait is tenderness; and wherein the DNA comprises a SNP position associated with a bovine trait, and wherein each primer comprises at least 20 contiguous nucleotides which are at least 90% identical to the sequences upstream and adjacent to the SNP position, wherein the first or second primer comprises a residue which is complementary to a specific sequence variant which comprises the SNP position; or~~

~~b) complements of the first and second primers; and~~

~~e) b) an extension primer which is capable of binding binds to a the first and second strand of the target sequence adjacent to downstream from the primers of (a) or (b); a SNP position located in a region less than about 500,000 nucleotides from nucleic acid residue 300 of SEQ ID NO:20614, wherein the extension primer is a substrate for polynucleotide synthesis across the SNP position, and wherein the SNP position corresponds to nucleic acid residue 300 of SEQ ID NO:20614.~~

25. (Previously presented) ~~The combination of isolated polynucleotides~~ polynucleotide of claim 24, wherein ~~each the isolated polynucleotide~~ first polynucleotide is at least 25 nucleotides in length.

Claims 26-32 (Cancelled)

33. (Currently amended) The ~~combination of~~ isolated ~~polynucleotides~~ polynucleotide of claim 24, wherein the target sequence is DNA or RNA.
34. (Currently amended) The ~~combination~~ isolated ~~polynucleotides~~ polynucleotide of claim 34 24, wherein a nucleotide occurrence for the SNP position is associated with ~~the~~ a bovine subject having a value of for tenderness that is within at least a 50th percentile of the bovine population for ~~the trait~~tenderness.
35. (Currently amended) The ~~combination~~ isolated ~~polynucleotides~~ polynucleotide of claim 34, wherein a nucleotide occurrence for the SNP position is associated with a bovine subject having a value of for tenderness that is within at least a 99th percentile of the bovine population for ~~the trait~~tenderness.
36. (Canceled)
37. (Canceled)
38. (Canceled)
39. (Canceled)
40. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ first polynucleotide of claim 24, ~~wherein~~ in combination with at least a second polynucleotide and wherein at least one of the first polynucleotide and second ~~primers~~ polynucleotide comprises a non-target sequence[[s]].
41. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ first polynucleotide of claim 24, in combination with at least a second polynucleotide and wherein at least one of the first polynucleotide and second ~~primers~~ polynucleotide is bound to a solid phase.
42. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ first polynucleotide of claim 24, in combination with at least a second polynucleotide and wherein at least one of the first polynucleotide and second ~~primers~~ polynucleotide is detectably labeled.
43. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ combination of claim 42, wherein the detectable label is at a position corresponding to position 300 of SEQ ID NO: 20614.

44. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ combination of claim 40, wherein at least one of the first and second ~~primers~~ polynucleotides comprises a target sequence for a separate third primer.
45. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ polynucleotide of claim 24, wherein the polynucleotide is an extension primer ~~comprises comprising~~ at least 20 contiguous nucleotides ~~which are at least 90% identical to the sequences upstream and adjacent to the SNP position~~, and wherein the extension primer comprises a 3'-terminal residue which is at least one nucleotide position upstream from position 300 of sequence SEQ ID NO: 20614.
46. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ polynucleotide of claim 45, wherein the extension primer binds to ~~the~~ a same strand as ~~the first or second~~ a first primer.
47. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ polynucleotide of claim 24, wherein the extension primer binds to a different strand from ~~the~~ a first ~~or second~~ primer.
48. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ polynucleotide of claim 24, wherein the extension primer is detectably labeled.
49. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ polynucleotide of claim 24, wherein the extension primer comprises non-target sequences.
50. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ polynucleotide of claim 49, wherein the extension primer comprises a target sequence for a separate third primer.
51. (Currently Amended) The ~~combination~~ isolated ~~polynucleotides~~ polynucleotide of claim 24, wherein ~~at least one of the primers~~ the first polynucleotide comprises a 3'-terminal nucleotide residue which is complementary to a specific ~~sequence variant which comprises nucleotide in the~~ SNP position.